



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,355	12/29/2000	James E. Pricer	9226	8429
26890	7590	06/12/2007	EXAMINER	
JAMES M. STOVER			STRANGE, AARON N	
NCR CORPORATION				
1700 SOUTH PATTERSON BLVD, WHQ4			ART UNIT	PAPER NUMBER
DAYTON, OH 45479			2153	
			MAIL DATE	DELIVERY MODE
			06/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/752,355	PRICER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Aaron Strange	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 26 March 2007.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-24 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-24 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
 

Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)
 

Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see pages 8-9 of the remarks filed 3/26/07, with respect to the rejection(s) of claim(s) 1-24 under 35 U.S.C. § 103(a) as being unpatentable over Muret and Tsuchida have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Miller et al. (WO 00/20998).

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muret et al. (US 2002/0042821) in view of Tsuchida et al. (US 6,026,394) in further view of Miller et al. (WO 00/20998).

4. With regard to claim 1, Muret et al. disclose a method for use in tracking the actions of an Internet user, comprising:

loading data from a plurality of transaction logs of a plurality of Internet servers into a database system (log engine loads log files into a table for processing) (¶51,

Lines 1-2 and ¶57), where the data includes an entry for each request to the Internet server (¶51, Lines 4-6), including information identifying the which user submitted the request (¶71, Lines 7-10) and information identifying the time at which the request was received (¶55, Lines 1-5); and

selecting from the data all entries associated with a particular user and corresponding to a single session of that user (¶71). Muret et al. fails to disclose that the database system is managed by plural parallel processing modules or executing a database query across the plural parallel processing modules using a moving difference database management function to select the entries from the data.

Tsuchida et al. teach the use of plural parallel processing modules as a means to decrease the time required to search a database (Col 2, Lines 54-58). Tsuchida discloses a plurality of parallel processing modules including distribution nodes, join nodes, and decision management nodes (Col 2, Line 59 to Col 3, Line 18). These nodes distribute the workload related to the query process, and work on it in parallel to achieve a result faster.

Miller discloses a similar system for retrieving data from a database. Miller teaches using a moving difference database function to produce determine a moving difference for data in a sorted list. This would have been an advantageous addition to the system disclosed by Muret since it would have allowed the user to use a single function to easily locate all entries in the database that are time stamped within a defined range, such as the 30 minutes taught by Muret (¶71).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use plural parallel processing modules in the database system to select the entries for a particular user from the data and extract the entries from a the database using a moving difference database function. These additions would have been advantageous since it they have greatly sped up the process of sorting through the data to select the desired entries.

5. With regard to claim 2, Muret et al. further disclose that the step of selecting includes selecting entries with time stamps lying in a predetermined range (¶71, Lines 10-13).

6. With regard to claim 3, Muret et al. further disclose that the step of selecting includes comparing time stamps of entries and selecting each entry for which the time stamp differs from the time stamp of another entry by less than a predetermined amount (¶71, Lines 10-13).

7. With regard to claim 4, Muret et al. further disclose that the step of selecting includes selecting each entry for which the time stamp differs from the time stamp of another entry by less than 30 minutes (¶71, Lines 10-13).

8. With regard to claim 5, Muret et al. further disclose sorting the selected entries chronologically to reconstruct the user's clickstream (¶72, Lines 4-5).

Art Unit: 2153

9. With regard to claim 6, Muret et al. disclose a computer program for use in tracking the actions of an Internet user, the program comprising executable instructions that cause one or more computers to:

load data from transaction logs of a plurality of Internet servers into a database system (log engine loads log files into a table for processing) (¶51, Lines 1-2 and ¶57), where the data includes an entry for each request to the Internet server (¶51, Lines 4-6), including information identifying the which user submitted the request (¶71, Lines 7-10) and information identifying the time at which the request was received ¶55, Lines 1-5); and

select all entries associated with a particular user and corresponding to a single session of that user (¶71). Muret et al. fails to disclose that the database system is managed by plural parallel processing modules or executing a database query using a moving difference database management function across the plural parallel processing modules to select the entries from the data.

Tsuchida et al. teach the use of plural parallel processing modules as a means to decrease the time required to search a database (Col 2, Lines 54-58). Tsuchida discloses a plurality of parallel processing modules including distribution nodes, join nodes, and decision management nodes (Col 2, Line 59 to Col 3, Line 18). These nodes distribute the workload related to the query process, and work on it in parallel to achieve a result faster.

Miller discloses a similar system for retrieving data from a database. Miller teaches using a moving difference database function to produce determine a moving difference for data in a sorted list. This would have been an advantageous addition to the system disclosed by Muret since it would have allowed the user to use a single function to easily locate all entries in the database that are time stamped within a defined range, such as the 30 minutes taught by Muret (¶71).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use plural parallel processing modules in the database system to select the entries for a particular user from the data and extract the entries from a the database using a moving difference database function. These additions would have been advantageous since it they have greatly sped up the process of sorting through the data to select the desired entries.

10. With regard to claim 7, Muret et al. further disclose that, in selecting entries, the computer selects entries with time stamps lying in a predetermined range (¶71, Lines 10-13).

11. With regard to claim 8, Muret et al. further disclose that, in selecting entries, the computer compares time stamps of entries and selects each entry for which the time stamp differs from the time stamp of another entry by less than a predetermined amount (¶71, Lines 10-13).

Art Unit: 2153

12. With regard to claim 9, Muret et al. further disclose that, in selecting entries, the computer selects each entry for which the time stamp differs from the time stamp of another entry by less than 30 minutes (¶71, Lines 10-13).

13. With regard to claim 10, Muret et al. further disclose that the computer sorts the selected entries chronologically to reconstruct the user's clickstream (¶72, Lines 4-5).

14. With regard to claim 11, Muret et al. disclose a database system comprising:  
a plurality of data-storage facilities (database) (Fig 1, 300) for use in storing data received from transaction logs of a plurality of Internet server computers (¶51), where the data includes an entry for each request to the Internet server computers (¶51, Lines 4-6), including information identifying the which user submitted the request (¶71, Lines 7-10) and information identifying the time at which the request was received (¶55, Lines 1-5); and

one or more processing modules configured to manage the data stored in the data storage facilities (log engine) (¶57); and

a database-management component configured to select from the data all entries associated with a particular user and corresponding to a single session of that user (¶71). Muret et al. fails to disclose that the database system comprises plural parallel processing modules or executing a database query across the plural parallel processing modules using a moving difference database management function to select the entries from the data.

Art Unit: 2153

Tsuchida et al. teach the use of plural parallel processing modules as a means to decrease the time required to search a database (Col 2, Lines 54-58). Tsuchida discloses a plurality of parallel processing modules including distribution nodes, join nodes, and decision management nodes (Col 2, Line 59 to Col 3, Line 18). These nodes distribute the workload related to the query process, and work on it in parallel to achieve a result faster.

Miller discloses a similar system for retrieving data from a database. Miller teaches using a moving difference database function to produce determine a moving difference for data in a sorted list. This would have been an advantageous addition to the system disclosed by Muret since it would have allowed the user to use a single function to easily locate all entries in the database that are time stamped within a defined range, such as the 30 minutes taught by Muret (¶71).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use plural parallel processing modules in the database system to select the entries for a particular user from the data and extract the entries from the database using a moving difference database function. These additions would have been advantageous since they have greatly sped up the process of sorting through the data to select the desired entries.

15. With regard to claim 12, Muret et al. further disclose that the database-management component is configured to select entries with time stamps lying in a predetermined range (¶71, Lines 10-13).

16. With regard to claim 13, Muret et al. further disclose that the database-management component is configured to compare time stamps of entries and select each entry for which the time stamp differs from the time stamp of another entry by less than a predetermined amount (¶71, Lines 10-13).

17. With regard to claim 14, Muret et al. further disclose that the database-management component is configured to select each entry for which the time stamp differs from the time stamp of another entry by less than 30 minutes (¶71, Lines 10-13).

18. With regard to claim 15, Muret et al. further disclose that the database-management component is configured to sort the selected entries chronologically to reconstruct the user's clickstream (¶72, Lines 4-5).

19. With regard to claim 16, Muret further discloses processing the data loaded into a single database table to extract each entry in the single database table the information identifying which user submitted the request (IP address) and the information identifying the time at which the request was received (timestamp) (at least ¶55).

20. With regard to claim 17, Muret further discloses storing the extracted information in a database table having multiple columns, one for the information identifying which user submitted the request, and another for the information identifying the time at which

the request was received (each line is separated into several fields, including IP/session ID and timestamp) (at least ¶55 and 71).

21. With regard to claim 18, Muret further discloses that loading data into a single database table includes loading data into a table having a single column, where the single column includes a row for each entry in the one or more transaction logs of the one or more Internet servers (at least ¶51 and 55).

22. Claims 19-21 are rejected under the same rationale as claims 16-18, since they recite substantially identical subject matter. Any differences between the claims do not result in patentably distinct claims and all of the limitations are taught by the above cited art.

23. Claims 22-24 are rejected under the same rationale as claim 17, since they recite substantially identical subject matter. Any differences between the claims do not result in patentably distinct claims and all of the limitations are taught by the above cited art.

### ***Conclusion***

24. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

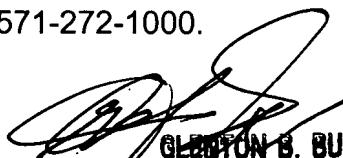
Art Unit: 2153

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Strange whose telephone number is 571-272-3959. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



GLEN B. BURGESS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

AS 6/6/07